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### REMARKS

Entry of this Amendment is proper under 37 CFR §1.116 since it formally cancels claims 17 and 18, which the Examiner has withdrawn from consideration, no new issues are raised, and the clarification concerning the "convex" and "concave" terminology is required to clarify issues for appeal.

It is noted that the claim amendments herein are intended solely to more particularly point out the present invention for the Examiner, and not for distinguishing over the prior art or the statutory requirements directed to patentability.

It is further noted that, notwithstanding any claim amendments made herein, Applicant's intent is to encompass equivalents of all claim elements, even if amended herein or later during prosecution.

Claims 1-16 and 19-20 are all of the claims pending in the present Application. Non-elected claims 17 and 18 are canceled above. Claims 1-3, 6, and 19 stand rejected under 35 USC §102(b) as anticipated by US Patent 6,076,294 to Durbin. Claims 4 and 5 stand rejected under 35 USC §103(a) as unpatentable over Durbin. Claim 7 stands rejected under 35 USC §103(a) as unpatentable over Durbin, further in view of US Patent 5,641,221 to Schindele et al. Claims 8-15 stand rejected under 35 USC §103(a) as unpatentable over Durbin, further in view of US Patent 5,036,243 to Cocks et al. Claim 16 stands rejected under 35 USC §103(a) as unpatentable over Durbin, further in view of Cocks, and further in view of US Patent 5,339,550 to Hoffman.

These rejections are respectfully traversed in view of the following discussion.

#### **I. THE CLAIMED INVENTION**

As described and claimed, for example by claim 1, the present invention is directed to an illumination apparatus including an LED light source and a light guide plate having a groove portion for receiving the LED light source and character portions formed by convex (raised) portions with desired shapes. The character portions are provided on a back surface of the light guide plate. A base member covers the back surface and the groove portion of the

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light guide plate. The base member is bonded to the light guide plate in a circumferential edge portion of the base member.

With such a combination, a novel decorative expression can be provided, as well as an illumination apparatus in which dust, water, etc., cannot enter a gap between a light transmission hole of a character plate and a light guide plate.

Moreover, with such raised portion, other decorative effects can be easily added to the characters by performing some treatment (e.g., silk printing) on the raised portions. If the characters are formed with recesses, treatment on the recess surface is sometimes difficult.

## II. THE PRIOR ART REJECTION

The Examiner alleges that US Patent 6,076,294 to Durbin discloses an illumination apparatus that anticipates claims 1-3 and 6. Applicants respectfully disagree.

Durbin teaches an illumination apparatus having diodes in which the character portions are machined out on a back face of a photoconductive plate 20 and the characters are visible because a fluorescent material covers a back plate behind the characters. This concept is entirely different from the present invention in which no fluorescent material is used to achieve the character display.

In contrast, the character portions of the present invention use convex surface portions of the character portions to allow light to be transmitted differently from the character portions than from the background portions of the light guide plate. If anything, the indicia 30 of Durbin result from a hollowing-out of the light guide plate.

The Examiner's comment in paragraph 20 on page 5 of the Office Action indicates that the Examiner is confused as to the significance of the terminology used in the disclosure "convex" and "concave", as used in the present invention. As clearly shown in Figure 3 and Figure 8, the term "convex" is intended to mean that the character is formed so as to be a raised portion of the light guide plate. The term "concave" is intended to mean that the character is formed as being a hollowed-out portion of the light guide plate.

As explained at line 25 of page 14 through line 5 of page 19 of the specification, this difference in height of the character compared to the height of the reflective surface 30 (Figure

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3) or the light emission layer (as in Figure 8) provides a contrast that can be discerned under either conditions of ambient light (external illumination) or internal illumination.

The prior art of record does not teach, suggest, or hint at this novel approach to providing a sign that can be seen under either ambient light or internal illumination. Additionally, the technique of the present invention provides a sign having unique characteristics under either ambient light or internal illumination.

Applicants have clarified this concept/terminology in both the claims and the specification. Applicants additionally submit that this clarification is required to be added to the record, as well as the specification, since the Examiner is seemingly confused as to the intended meaning. Applicants additionally submit that no new matter is being added by this clarification, since it is clear that the confusion results from a translation choice of wording. That is, the intent of the wording is clear from Figures 3 and 8. The specification/ claim amendments merely incorporate a choice of wording in English that more closely reflects the intent shown in Figures 3 and 8.

Relative to Durbin, an advantage to form the character portions with the raised portion is that other decorative effects can be easily added to the characters by performing some other treatment, such as silk printing, on the raised portions. If the characters are formed with recesses, treatment on the recess surface is sometimes difficult.

Further, the raised surfaces of the present invention provide an advantage that the raised characters are more evenly illuminated. In Durbin, it is possible that the light would not reach to a further portion in the character.

Hence, turning to the clear language of the claims, there is no teaching or suggestion of " ...character portions formed as convex portions with desired shapes ....", as required by independent claims 1 and 8.

Moreover, claim 19 describes the embodiment shown in Figure 8 in which the front face of the light guide plate is used to form the characters in either convex portions or concave portions. Durbin fails to suggest using the front surface of the light guide for the indicia.

The raised portions additionally offer the advantage that other decorative effects (e.g., silk printing) can be easily added to the characters.

Hence, turning to the clear language of the claims, there is no teaching or suggestion

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of " ... said character portions being provided on a front surface of said light guide plate ...", as required by claim 19.

For this reason alone, the claimed invention, as described by claims 1-16 and 19-20, is fully patentable over the cited references.

Moreover, Applicants again point out on the record, for purpose of appeal, that the rejection for claim 4 maintains an incorrect interpretation that a duplication of parts is being claimed. As previously pointed out, this claim actually refers to the groove outlining each character, as shown as label 42 in Figure 3. It does not at all refer to duplicating the groove 15 (Figure 3) for a second source of illumination 21, as the Examiner is understood as interpreting this claim language.

The advantage of this groove outlining the characters is that this groove causes additional contrast so that the character is even more visible. This concept is entirely different from that of duplication of a groove for a second light source.

For purpose of appeal, relative to the rejections for claims 7 and 14, as best understood, the Examiner's rationale is that Schindele, by reason of demonstrating a specific type of illuminated sign, thereby renders obvious any illuminated display on a car scuff plate. This reasoning is clearly illogical and contrary to MPEP § 2143.01, wherein it is clearly stated that: "*The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.*" (Emphasis in MPEP).

Relative to the rejection for claims 8-13 and 15, Applicants again point out on the record, for appeal, that hermetic sealing is required for high voltage applications such as shown in Cocks. Such additional manufacturing step is neither required nor normal for low voltage environments such as a 12-volt automobile electrical system.

Relative to the Examiner's comments of paragraph 12 on page 4 of the Office Action, Applicants respectfully point out that an "edge portion" is not at all equivalent to a "flange".

Further, the other prior art of record has been reviewed, but it too even in combination with Durbin, Schindele, Cocks, or Hoffman, fails to teach or suggest the claimed invention.

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### III. FORMAL MATTERS AND CONCLUSION

The Examiner is again requested to acknowledge on the record that the certified copy of the priority document, Japanese Application 2000-296635 having Japanese filing date September 28, 2000, has been received by the USPTO and that the present Application filed September 28, 2001, therefore, is entitled the benefit of this earlier Japanese filing date.

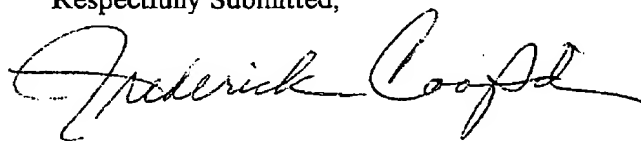
The Examiner is understood as having withdrawn the previous objection that the drawings fail to show the feature in claims 7 and 14.

In view of the foregoing, Applicant submits that claims 1-16 and 19-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,



Frederick E. Cooperrider  
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8/5/03

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**CERTIFICATION OF FACSIMILE TRANSMISSION**

I hereby certify that I am filing this Amendment by facsimile with the United States Patent and Trademark Office to Examiner Silbermann, J., Group Art Unit 3611 at fax number (703) 872-9327 this 5<sup>th</sup> day of August, 2003.



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